



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 10**

1200 Sixth Avenue, Suite 900  
Seattle, WA 98101-3140

SEP 17 2013

OFFICE OF  
WATER AND WATERSHEDS

Mr. Bill Bradbury, Chair  
Northwest Power and Conservation Council  
851 SW Sixth Ave., Suite 1020  
Portland, Oregon 97204-1347

Mr. Jim Yost  
Northwest Power and Conservation Council  
P.O. Box 83720  
Boise, Idaho 83720-0062

Ms. Jennifer Anders, Vice Chair  
Northwest Power and Conservation Council  
Capitol Station  
1301 Lockey  
Helena, Montana 59620-0805

Mr. Bill Booth  
Northwest Power and Conservation Council  
P.O. Box 83720  
Boise, Idaho 83720-0062

Mr. Harry Lorenzen  
Northwest Power and Conservation Council  
851 SW Sixth Ave., Suite 1020  
Portland, Oregon 97204-1347

Mr. Tom Karier  
Northwest Power and Conservation Council  
924 Capitol Way S., Suite 105  
Olympia, Washington 98501

Mr. Pat Smith  
Northwest Power and Conservation Council  
Capitol Station  
1301 Lockey  
Helena, Montana 59620-0805

Mr. Phil Rockefeller  
Northwest Power and Conservation Council  
924 Capitol Way S., Suite 105  
Olympia, Washington 98501

Dear Chair Bradbury, Vice Chair Anders and Members of the Northwest Power and Conservation Council:

On behalf of the U.S. Environmental Protection Agency, I am submitting recommendations to the Northwest Power and Conservation Council (Council), Columbia River Basin Fish and Wildlife Program 2013-2014 amendment process. Specifically, I am writing to encourage the Council to consider increasing the emphasis on fish and wildlife recovery actions that better assess and/or reduce toxic contaminants in the Columbia River Basin as a part of the Columbia River Basin Fish and Wildlife Program. The EPA is also requesting that the Columbia River Basin Fish and Wildlife Program provide a scientifically based integration of future climate change scenarios into fish and wildlife assessment and recovery actions.

There are many toxic contaminants found throughout the Columbia River Basin, including PCBs, mercury, DDT, pesticides, flame retardants and many emerging contaminants of concern. Many of these contaminants have known negative effects on aquatic species found throughout the Columbia River Basin. The National Oceanic and Atmospheric Administration's Northwest Fisheries Science Center has documented the negative effects of toxic contaminants on salmon and reported on that science at the July 9, 2013, Council meeting.

The EPA is committed to a number of high priority work efforts in the Basin that are focused on reducing toxic contaminants to restore and protect fish and wildlife and protect human health. For the past eight years, the EPA has led a Columbia River Basin wide collaboration, the Columbia River Toxics Reduction Working Group, to share knowledge on toxic contaminants in the Basin and coordinate and increase specific toxic assessment and reduction actions. As a result of this collaboration, the Working Group developed the *2009 Columbia River Basin State of the River Report*<sup>1</sup>, which provided a bellwether Basin wide characterization of toxic contamination using indicator species and a status of toxic reduction work efforts in the Basin. This report was followed up by the *2010 Columbia River Basin Toxics Reduction Action Plan*<sup>2</sup>, which identified 61 actions necessary to reduce toxics in the Basin, including the replication of successful pesticide stewardship collaborations, local stormwater control, and increased assessment and monitoring.

The EPA has been working with the States of Oregon, Idaho and Washington, and Tribal Governments to develop more protective Clean Water Act human health and aquatic life criteria for toxics that when implemented will significantly reduce toxics in fish and wildlife in the Basin. The EPA is committed to the cleanup of Portland Harbor and work efforts to better understand and reduce toxics in the Upper Columbia as a part of the ongoing Remedial Investigation and Feasibility Study. The EPA is working with the Spokane River Toxics Task Force to better understand and reduce PCB contamination in the Spokane River. However, the EPA's authority and appropriations have never enabled EPA to undertake broad scale remedial efforts to characterize and reduce toxic contamination throughout the Columbia River Basin. Therefore, the EPA strongly urges both the Council and Bonneville Power Administration to take steps to establish and meaningfully support a substantive monitoring and toxics reduction collaboration.

Given the impacts of the hydroelectric system, the Council Fish and Wildlife Program should provide the mitigations necessary to protect and restore Clean Water Act designated beneficial uses established in State, Tribal and Federal law. The Columbia River Basin hydroelectric system, while providing major benefits to the Pacific Northwest, also has created an altered flow regime as a result of the series of reservoirs, which may become sinks or deposit zones for toxic contaminants. One specific example is the methylation of mercury, which can occur as a result of mercury from various sources becoming entrained in an anoxic reservoir/slack water system. This methylated mercury often bioaccumulates in fish in the Columbia River Basin, entering the food web and causing significant fish contamination and fish advisories in rivers throughout the Basin.

In light of the context described above, the EPA recommends specific recommended actions for the Fish and Wildlife Program to the Council to reduce toxic contamination throughout the Basin. The first recommendation is for the Council to provide leadership on Basin wide

---

<sup>1</sup> <http://www2.epa.gov/columbiariver/state-river-report-toxics>

<sup>2</sup> <http://www2.epa.gov/columbiariver/columbia-river-basin-toxics-reduction-action-plan-september-2010>

collaboration. The Council has demonstrated great leadership in fish and wildlife recovery collaboration throughout the Basin; applying that collaborative leadership in the area of toxic contamination would likely result in increased toxics assessment and reduction actions. A specific example would be to increase the dialogue and conversation on the scientific effects of toxic contaminants on fish and wildlife to better understand impacts on fish and wildlife recovery efforts.

A second recommendation is for the Council to provide support for a Basin wide monitoring and characterization of toxic contamination, including the mapping of existing contamination and known toxic discharges in relation to fish and wildlife populations and habitat restoration. The EPA recommends to the Council that an increased understanding of existing toxic contamination will bring financial accountability to the Council program to ensure that the benefits of resources allocated to fish recovery will not be diminished by potential effects of toxic contamination.

A third recommendation is for the Council to provide a review and assessment of how hydroelectric projects affect toxic contaminants in the Columbia River Basin and how toxic contaminants can impact the fish that are impounded behind dams. Fish species have been affected in various ways by the development and operation of the hydropower system. Dam presence can be associated with the accumulation of toxic sediments and the presence of reservoirs and their operations can be a controlling factor on the chemical conditions, such as anoxia and mercury as previously discussed, which can impact the distribution and bioavailability of toxics in a reservoir system and in turn may impact recovery efforts.

A fourth recommendation is for the Council to promote and provide resources to support actions that prevent toxic contamination from entering the Columbia River Basin. There are many opportunities to invest in important collaborative work efforts that can significantly reduce toxic contaminant loading to the Columbia River Basin and significantly improve fish health and promote fish recovery. Some of the successful work efforts to date include the Yakima River Basin sediment reduction efforts, which successfully and dramatically reduced DDT in fish in the Yakima River; WyEast Resource Conservation and Development Area pesticide reduction work, partially funded through the Council's Fish and Wildlife Program<sup>3</sup>; pesticide stewardship partnerships in the Walla Walla Basin, which reduced organophosphate pesticides by 90% in the Walla Walla River; and the successful agricultural take back programs throughout the Columbia River Basin, which have collected more than 2 million pounds of banned and unused legacy pesticides for safe disposal that will not contaminate nearby rivers and streams.

We value the regional leadership that the Council has provided in addressing climate change impacts in the Columbia River Basin. We believe the Council has the opportunity in an amended Fish and Wildlife Program to be more proactive on a fish and wildlife recovery program that takes into account the vulnerability of the Columbia River Basin from future impacts expected in the Pacific Northwest as a result of climate change, including increased winter temperatures, decreased snowpack, decreased streamflows, changes in peak flows and increased water

---

<sup>3</sup> <http://www.nwcouncil.org/media/30321/2006winter.pdf>

temperatures.<sup>4</sup> EPA encourages the Council's Fish and Wildlife Program to apply readily available climate change science to anticipate future scenarios and design and implement adaptive measures, rather than making mitigation decisions after the fact in response to ecosystem changes. For example, EPA recommends that the Council's Fish and Wildlife Program provide assessment and implementation actions, such as temperature control structures, for hydroelectric facility mitigation for future water temperature increases predicted by scientifically based climate change scenarios.

In conclusion, the EPA would like to thank the Northwest Power and Planning Council for your impressive leadership and collaborative work efforts in restoring the fish and wildlife of the Columbia River Basin. We look forward to working with you as the Fish and Wildlife Program is revised and updated. We believe that a collaborative partnership with Council leadership in reducing toxics and addressing the impacts of climate change will bring increased accountability and success to the important fish and wildlife recovery efforts in the years ahead.

Please feel free to contact me at (206) 553-1855 if have any questions or need further information.

Sincerely,



Daniel D. Opalski, Director  
Office of Water and Watersheds

---

<sup>4</sup> <http://www.epa.gov/climatechange/impacts-adaptation/northwest.html>